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DEC 05 2006

Atty Dkt. No.: 10030416-1
USSN: 10/698,195**REMARKS**

In view of the above amendment and the following remarks, the Examiner is requested to allow claims 1-10, 13-15, 22, and 24-29, the only claims pending and under examination in this application.

Claim 1 has been amended to recite that a full length synthesis probability measure is determined by evaluation of the susceptibility to depurination during synthesis of each probe sequence. Support for this amendment can be found in the specification, particularly beginning at page 23.

No new matter has been added. As the above amendment places the application in better form for consideration on appeal, entry thereof is respectfully requested.

Pending Claims

Applicants added new Claims 24-29 in their prior amendment and response. As such, the pending claims are 1-10, 13-15, 22, and 24-29. The Examiner, however, did not indicate Claim 29 as a pending claim either on the Form PTOL-326 or in the body of the Final Office Action. Clarification is respectfully requested.

Claim Rejections – 35 U.S.C. § 101

Claims 1-10, 22, and 24-28 were rejected under 35 U.S.C. § 101 for allegedly being directed to non-statutory subject matter. This rejection is respectfully traversed.

The Examiner asserted that the method of the rejected claims "does not result in a physical transformation of matter, nor is any concrete, tangible, and useful result produced/recited." Office Action at page 3.

Applicants respectfully disagree. Applicants method permits identification and selection of a nucleic acid sequence that is immediately suitable for use (or worthy of further evaluation as suitable for use) as a surface immobilized probe for a target nucleic acid. See Applicants' specification at page 19. Applicants submit that such

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identification and selection are of considerable value in the array art, and represent concrete, tangible, and useful results to the skilled worker in that art.

By analogy, suppose one claimed an algorithmic method of identifying a site for drilling for oil based on high probability measures, which method results in a high likelihood that oil will be found at the site. Would such a method not be valuable, concrete, tangible, and useful? One should recognize the worth of such a method immediately. Actual drilling and discovery of oil at the site would only substantiate the method, and would not be necessary to make the method concrete, tangible, and useful.

Therefore, Applicants' claimed invention is drawn to statutory subject matter. Withdrawal of this rejection is respectfully requested.

Claim Rejections – 35 U.S.C. § 102

Claims 1-3 and 10 were rejected under 35 U.S.C. § 102(b) as allegedly being anticipated by Shannon et al. (US Patent No. 6,251,588) (hereinafter "Shannon").¹ This rejection is respectfully traversed.

A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference. *Verdegaal Bros. v. Union Oil of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987).

The Examiner asserted that Claim 1 does not specify or recite any particular type of method of determining the full length synthesis probability measure. Present Claim 1 recites that a full length synthesis probability measure is determined by evaluation of the susceptibility to depurination during synthesis of each probe sequence.

Shannon does not disclose evaluation of depurination susceptibility. Instead, Shannon discloses identifying a sequence for use as a probe based on hybridization and complementarity. Therefore, because Shannon does not identically disclose each and every element of Applicants' claims, there is no anticipation.

¹ Applicants presume that this is the rejection intended by the Examiner. The Examiner did not recite the rejection in the Final Office Action, but stated only that "[t]his rejection is maintained." Final Office Action at page 3. Clarification is respectfully requested.

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Withdrawal of this rejection is respectfully requested.

Claim Rejections – 35 U.S.C. § 103(a)

Claims 13-15 were rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Chee et al. (US Patent No. 5,837,832) (hereinafter "Chee") in view of Shannon.² This rejection is respectfully traversed.

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation either in the cited references themselves or in the knowledge generally available to an art worker, to modify the reference or to combine reference teachings so as to arrive at the claimed method. Second, the art must provide a reasonable expectation of success. Finally, the prior art reference must teach or suggest, all the claim limitations (MPEP § 2143). The teaching or suggestion to arrive at the claimed method and the reasonable expectation of success must both be found explicitly or implicitly in the prior art, or be based on an *explanation* of the knowledge of one of ordinary skill in the art, but cannot be based on Applicant's disclosure (MPEP § 2143 citing with favor, *In re Vaack*, 20 USPQ2d 1438 (Fed. Cir. 1991)). See also, *Dystar Textilfarben GmbH & Co. Deutschland KG v. C.H. Patrick Co.*, 464 F.3d 1356, 80 USPQ2d 1641 (Fed. Cir. 2006).

As Applicants have pointed out in the § 102(b) rejection, *supra*, Shannon is deficient by virtue of being based on hybridization and complementarity and for not disclosing evaluation of depurination susceptibility. Chee does not teach or suggest anything that would remedy these deficiencies.

Accordingly, for at least the reason that the combination of cited documents does not teach or suggest all of the elements of Applicants' claims, there is no *prima facie* obviousness. Withdrawal of this rejection is respectfully requested.

² Applicants presume that this is the rejection intended by the Examiner. The Examiner did not recite the rejection in the Final Office Action, but stated only that the § 103 rejection is maintained as well. Final Office Action at page 4. Clarification is respectfully requested.

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CONCLUSION

Applicants submit that all of the claims are in condition for allowance, which action is requested. If the Examiner finds that a telephone conference would expedite the prosecution of this application, please telephone John Brady at (408) 553-3584.

The Commissioner is hereby authorized to charge any underpayment of fees associated with this communication, including any necessary fees for extensions of time, or credit any overpayment to Deposit Account No. 50-1078, order number 10030416-1.

Respectfully submitted,



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